

# POLLUTION PREVENTION



***Presented By:*** The Directorate of  
Safety Health and Environment's  
Pollution Prevention Program

**IT JUST MAKES SENSE!**

**Primo Levi**  
**1919-1987**



# WHAT IS P2 ?

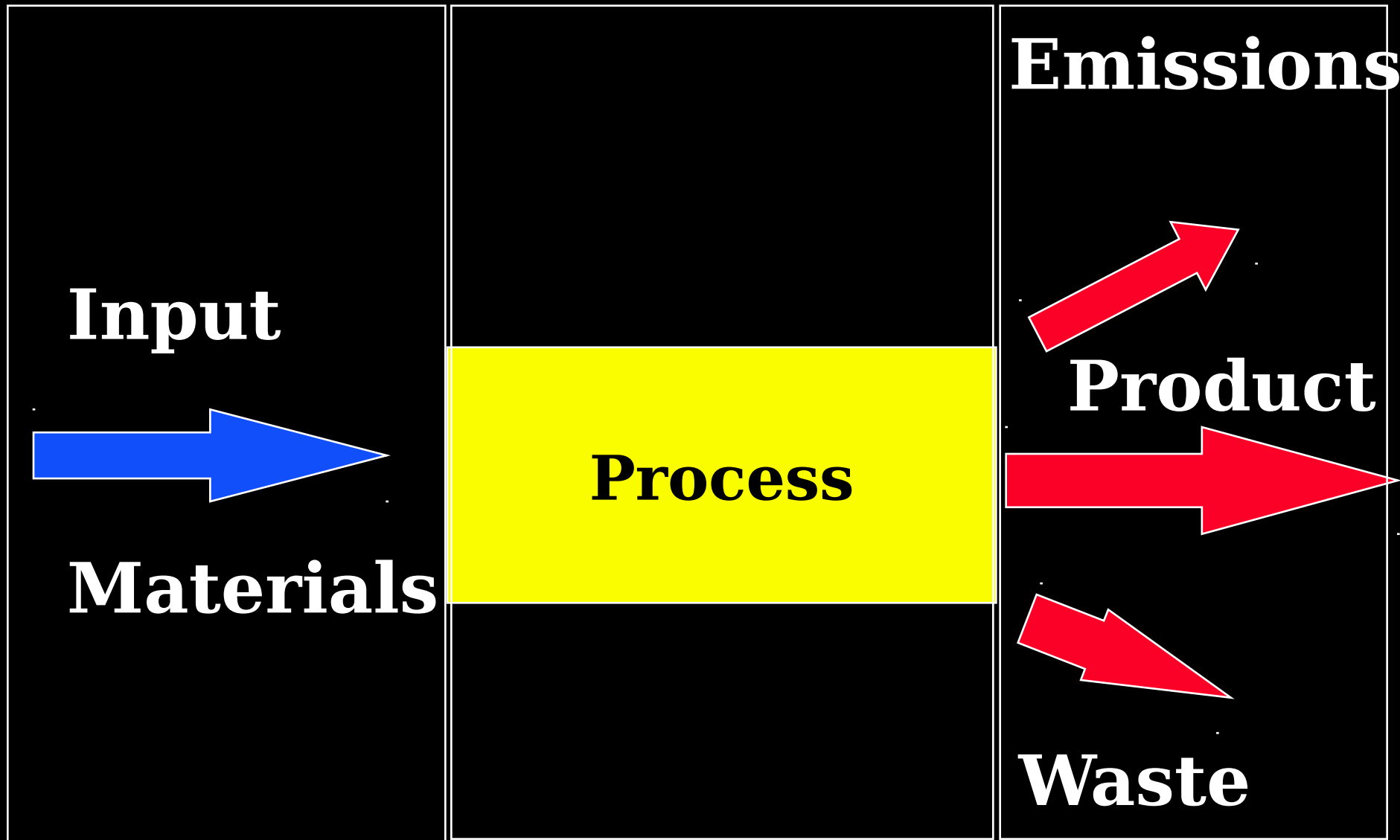
## Source Reduction



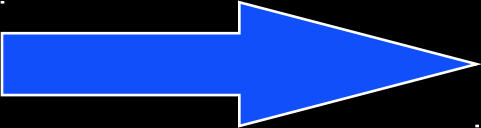
# WHAT IS P2 ?

## Material Substitution

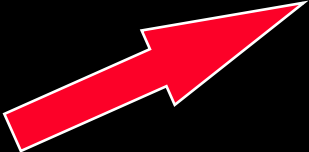
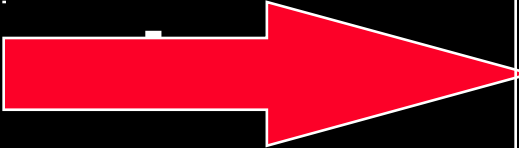





# Source Reduction Emissions

**Input**  
  
**Materials**

**Process**

  
**Produ**  
  
  
**Waste**

# P2 IS REQUIRED

EO 13148 - Greening the Government  
Through Leadership in  
Environmental Management

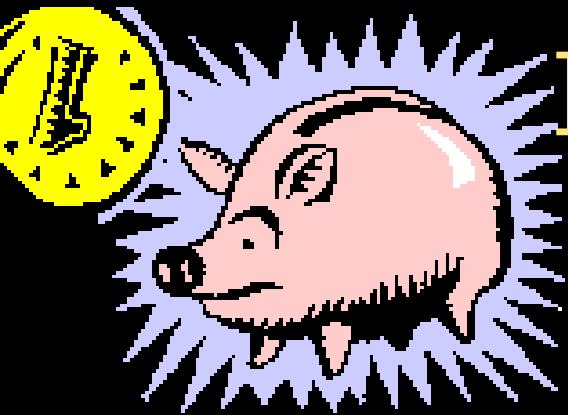




# BENEFITS OF P2

- Improved worker health and safety
  - Minimize exposure to hazardous products
  - Improved training leads to safer work practices





# BENEFITS OF P2

## ■ Cost Savings

- Savings in material, supply, and tracking costs
- Reduced liability
- Elimination of expensive clean-up costs



# BENEFITS OF P2

## ■ Environmental Protection

- Cleaner and water
- Conserve natural resources
- Reduce pollutants entering the environment

# SEVEN P2 TECHNIQUES

- Policy/Procedural Change
- Equipment/Process Change
- Material Reuse
- Material Substitution
- Process Efficiency Improvement
- Improved Housekeeping
- Inventory Controls



# POLICY OR PROCEDURAL CHANGE

## Technique 1

APG has an  
Environmentally  
Preferable Paint  
Policy.



# POLICY OR PROCEDURAL CHANGE

Technique 1

## Aberdeen Conserves Energy (ACE)

- Initiated in 1997
- Compressed work schedule
- Holiday closings
- \$1 million/year savings



# POLICY OR PROCEDURAL CHANGE

Technique 1

**Central  
storage/distribution  
points for hazardous  
materials**

- ARL
- ATC
- OC&S



# EQUIPMENT OR PROCESS CHANGE

## Technique 2

**The MRICD histology lab  
recycles ethanol using a  
distillation unit.**



# EQUIPMENT OR PROCESS CHANGE

Technique 2

**EDSI replaced  
its solvent  
degreasers with  
aqueous parts  
washers.**



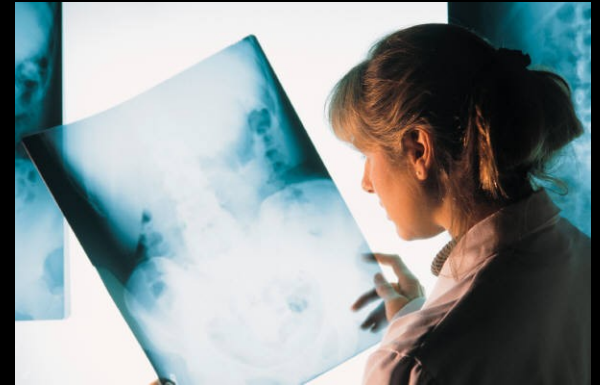


# EQUIPMENT OR PROCESS CHANGE

## Technique 2

### Digital Photography/ X-Ray

- ATC
- DSHE
- ECBC
- KUSAHC and  
DENTAC



# REUSE OF MATERIALS

## Technique 3

**DSHE facilitated the deconstruction of two large ship engines.**



# REUSE OF MATERIALS

## Technique 3

### Retread Tires

- ATC on commercial vehicles
- Save \$794.16/year



# MATERIAL SUBSTITUTION

## Technique 4

The APG P2 Program labels environmentally preferable products in the Office Eagle.





# MATERIAL SUBSTITUTION

## Technique 4

**This white picket fence by Bldg. 1320 is made out of plastic lumber.**



# MATERIAL SUBSTITUTION

## Technique 4

**EDSI replaced aerosol solvents with compressed air sprayers and citrus-based cleaners for cleaning and degreasing.**



# PROCESS EFFICIENCY IMPROVEMENTS

## Technique 5

**The golf course  
uses Integrated  
Pest  
Management  
and Best  
Management  
techniques to  
save money and  
prevent  
pollution.**



# PROCESS EFFICIENCY IMPROVEMENTS

## Technique 5

**APG labs  
prevent  
pollution by  
using  
equipment  
like this  
automatic  
pipetter.**





# IMPROVED HOUSEKEEPING

## Technique 6

- Reduced opportunities for accidents
  - proper labels
  - organized
- Preventative maintenance



# INVENTORY CONTROLS

## Technique 7

The hazardous material barcode color changes every year.

Barcode#	Year Barcoded
1A010000	2001
2A010000	2002
3A010000	2003

**Put Your Inventory In Order**

**HAZMART/HITS**  
*hotline*  
**1-410-436-7480**

**AP<sub>2</sub>G**  
*Pollution*  
**PREVENTION**

**Move hazardous materials with  
oldest BARCODES to the front**

**The Philip Merrill  
Environmental Center**  
Chesapeake Bay Foundation  
Annapolis, Maryland









**Royal Blue**

**Whitewashed**



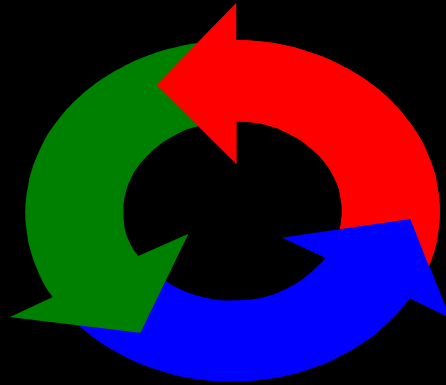








# **AFFIRMATIVE PROCUREMENT**



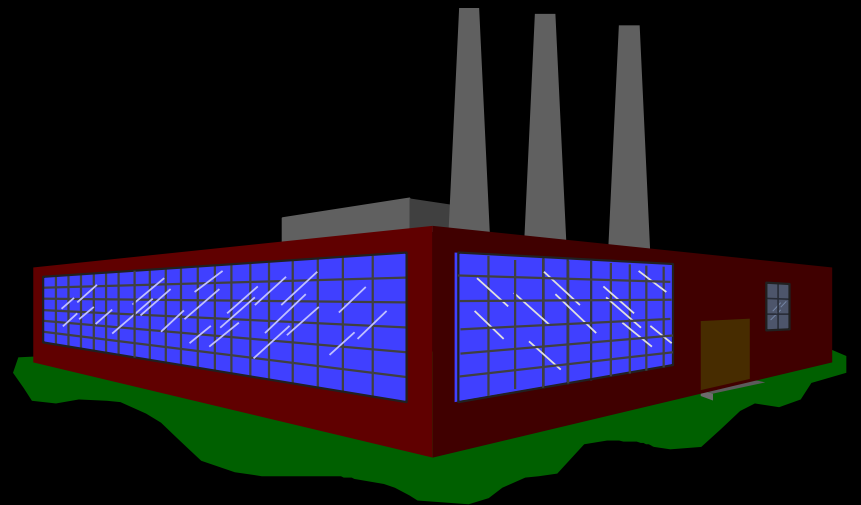
- **Recycled content**
- **Less hazardous chemicals**
- **Energy efficient products**

# CPG and RMAN Defined

- CPGs designate the products that must contain recovered material
- RMANs provide recycled-content recommendations and guidance on buying recycled-content products

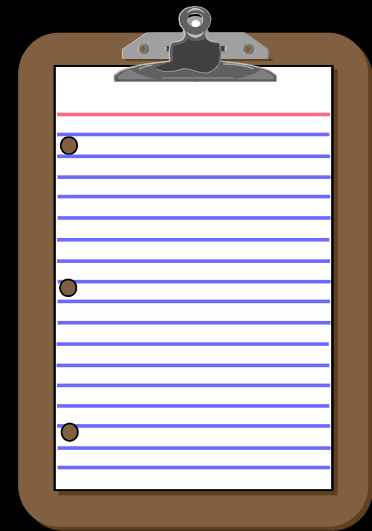
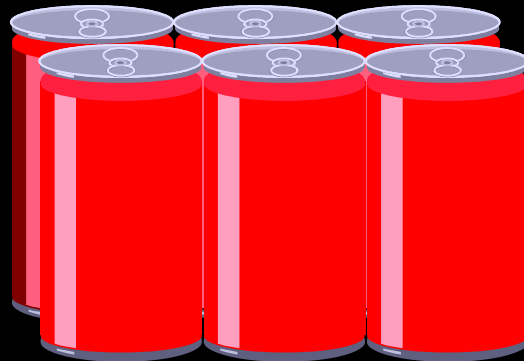
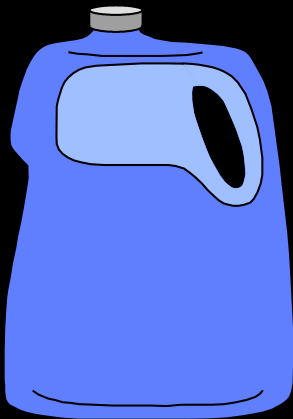
# What is “Recycled”?

Products made from manufacturing scraps or by-products, and post-consumer materials.



# What is “Post Consumer Recycled”?

The reprocessed material of discarded products, used as raw material for another product.



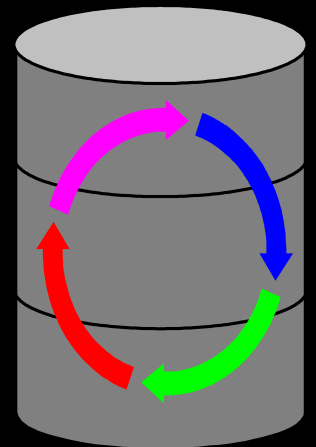
# RMAN (example)

## *Non-Paper Office Products*

<b>PRODUCT CATEGORY</b>	<b>% POSTCONSUMER FIBER CONTENT</b>	<b>% RECOVERED FIBER</b>
<b>Plastic Trash Bags</b>	<b>10-100%</b>	
<b>Plastic covered binders</b>		<b>25-50%</b>
<b>Paper covered binders</b>	<b>75-100%</b>	<b>90-100%</b>

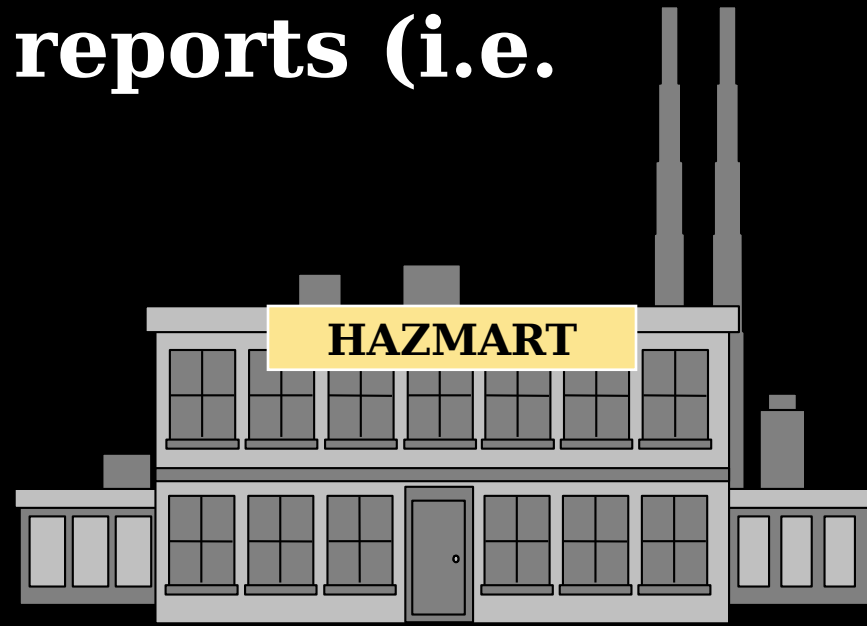
# HM Policy Overview

- Use HM only when required
- Use substitutes
- Purchase essential quantities
- Handle properly

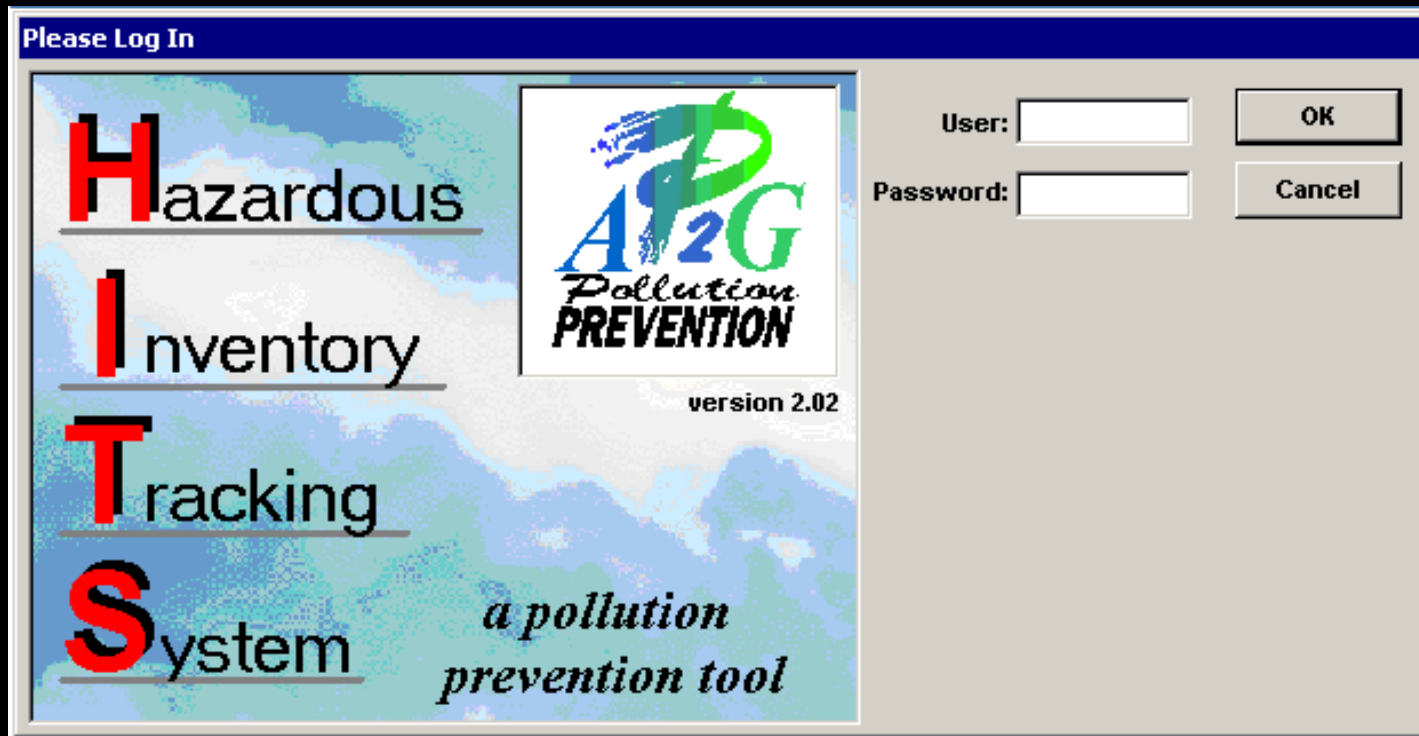


# The HAZMART

- **Primary point of entry for hazardous materials**
- **Reduces time spent managing inventory**
- **Generates accurate reports (i.e. TRI, EPCRA, etc)**







- **Hazardous Inventory Tracking System (HITS)**
- **Tracks the life of hazardous materials on post**

**Free!**

# **FREEBIES**



Get chemicals or  
products you  
need **FAST** and **FREE** !!

Get unneeded hazardous materials off  
your shelves and into the hands of  
someone who can use

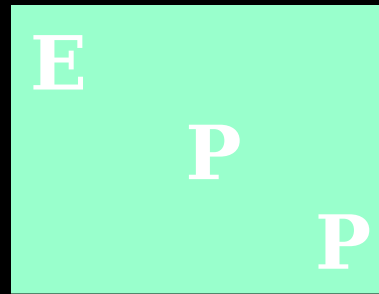
them



# Updates to HITS

- Environmentally preferable substitute drop down menus
- Upper and lower inventory limits
- PBT labels

# Product Labeling in HITS



A stylized illustration of a hand with a green vine wrapped around its index finger. The hand is light blue with a darker blue cuff. The vine is green with small leaves.

# What's Your Role?

- Keep HM inventory current and to a minimum
- Use Freebies
- Stay current in your field
- Ask us for help
- Think P2 while carrying out everyday activities

A photograph of a garden scene. In the foreground, several purple flowers with six petals each are in focus, growing on green stems with long, narrow leaves. Behind them, a cluster of red flowers is visible but slightly out of focus. The background is a soft-focus view of a garden path or more foliage.

**PRACTICE P2 EVERY DAY**

**IT'S A WAY OF LIFE**

# **APG's Pollution Prevention Program**

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**Maia Kaiser 4-2274**

**Maia.Kaiser@usag.apg.army.mil**

**Roland Fornoff 4-2273**

**Roland.Fornoff@usag.apg.army.mil**

**<http://www.apg.army.mil/AP2G/index.htm>**